

Notice of Allowability

Application No.

09/886,958

Examiner

Andrew C. Flanders

Applicant(s)

DOWLING ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 28 September 2006.
2. ☒ The allowed claim(s) is/are 1,3,5-22,24-35,37 and 39-99.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph Teja on 05 December 2006.

The application has been amended as follows:

Please amend the preamble of claim 20 to read "A computer readable medium encoded with a computer program that, when executed..."

Please amend the preamble of claim 51 to read "A computer readable medium encoded with a first computer program that, when executed on a processor, performs a

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method for executing a lighting program to control a plurality of light emitting diodes (LEDs), wherein the ~~processor is programmed~~ computer readable medium is encoded with a second computer program, that ~~processes~~ when executed on the processor, processes an audio input to determine at least one characteristic of the audio...”

Please amend the preamble of claim 64 to read “A computer readable medium encoded with a computer program that, when executed...”

Please amend the preamble of claim 71 to read “A computer readable medium encoded with a first computer program that, when executed on a processor, performs a method for executing a lighting program to control a plurality of light emitting diodes (LEDs), wherein the ~~processor is programmed~~ computer readable medium is encoded with a second computer program, that ~~processes~~ when executed on the processor, processes an audio input to determine at least one characteristic of the audio...”

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Regarding **Claims 1, 20, 35, 51, 57, 64, 71, 78, 86, 87 and 91**, the claims recites a lighting program that digitally processes a digital music file to determine at least one characteristic of the audio input. This determination includes determining the beat of the audio input and wherein the at least one characteristic relates to the beat. The

lighting program then includes a variable parameter that affects a perceivable aspect of a lighting effect in response to control signals and this is done in part on the determined beat of the audio input. The variable parameter relates to a perceived speed of the lighting effect and it is modified based on the determined beat of the audio input.

First, as to Kiltz (U.S. 5,191,319), the main piece of prior art, as Applicant has noted and Examiner has agreed in the interview dated 13 September 2006, Kiltz does not determine the beat of the audio signal. Kiltz is generally unconcerned with this feature and is more or less directed toward illuminating lamps based on frequency and amplitude of an audio signal.

Drago (U.S. 5,461,188) discloses a system for illuminating light based on sound. The Drago system does take into account a beat, however, no determination to the beat is made as noted by Applicant and agreed by Examiner. Drago includes a lighting program that simply illuminates a light based on a pre-programmed sequence. No determination is made as to the beat.

Haddad (U.S. 4,376,404) is another piece of prior art that illuminates lamps and controls liquid nozzles based upon an audio input. Haddad does in fact disclose determining the beat of an audio signal. However, Haddad determines this beat to control the liquid nozzles, not the lighting of the lamps.

Essentially, neither of the three references determines the beat and illuminates a light accordingly.

Furthermore, none of the three references use a digital determination. Eastty (U.S. 6,021,204) was used previously to show digital determination of audio

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characteristics such as intensity and frequency characteristics. However, Eastty is silent as to any beat determination.

Lastly, none of this is performed as a lighting program. Suzuki was shown previously to implement a device that extracts control data from waveforms in hardware or software.

Even if one were to combine the five above references to attempt to arrive at the claims, the rejection would still lack the digital determination of the beat.

Furthermore, there would be no motivation to one of ordinary skill in the art to combine these five references. Combining them could only be achieved using hindsight with the aid of Applicant's disclosure.

Claims 3, 5 – 19, 21, 22, 24 – 34, 37, 39 – 50, 52 – 56, 58 – 63, 65 – 70, 72 – 77, 79 – 85, 88, 89, 93 – 99 are allowable as being dependent upon an allowable independent claim.

Regarding **Claim 90**, claim 90 as amended discloses a graphical user interface that displays a plurality of icons representative of the plurality of LEDs, wherein the plurality of icons are configured to be selected and arranged on a layout space of the GUI in response to the user inputs provided via the GUI.

The claim essentially recites that the GUI displays the LEDs as they are arranged and shows the how the various effects will alter the arrangement. The closes prior art of

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record Drago (U.S. 5,461,188) discloses a GUI, but does not disclose displaying icons representing the plurality of LEDs arranged on a layout space of the GUI.

Regarding **Claim 92**, claim 92 is allowable for the reasons set forth by Applicant in the remarks dated 28 September 2006.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7546. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SINH TRAN
SUPERVISORY PATENT EXAMINER

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